

## Glossary

**Absorption** - The process of taking in or soaking up liquids (not to be confused with adsorption).

**AC** - hydrogen cyanide

**AC/DC** - alternating current/direct current

**Acid** - A compound, usually having a sour taste, which is able to neutralize an alkali or base. A substance that dissolves in water with a formation of hydrogen ions.

**Acidity** - A quantitative measurement of the total acid constituents of a water, both in the ionized and unionized states expressed as pH.

**Adsorption** - The adherence of dissolved, colloidal, and finely divided matter on the surfaces of solid bodies with which they are brought in contact (not to be confused with absorption).

**Aeration** - The bringing about of intimate contact between air and a liquid by one of the following methods: spraying the liquid in the air, bubbling air through the liquid, or by agitation of the liquid to promote surface absorption of air.

**Aerobic** - Requiring the presence of free oxygen.

**Aerobic Bacteria** - Bacteria which live and reproduce only in an environment containing oxygen which is available for their respiration (breathing), such as atmospheric oxygen or oxygen dissolved in water. Oxygen combined chemically, such as in water molecules, cannot be used for respiration by aerobic bacteria.

**Algae** - (1) Tiny plant life, usually microscopic, existing in water. They are mostly green, blue-green, or yellow-green, and are the cause of most tastes and odors in water. (2) Microscopic plants which contain chlorophyll and live floating or suspended in water. They may be attached to structures, rocks, or other submerged surfaces. Excess algae growths can impart tastes and odors to potable water. Algae produce oxygen during sunlight hours and use oxygen during the night hours. Their biological activities appreciably affect the pH and dissolved oxygen of the water.

**Algae Bloom** - Large masses of algae occurring in bodies of water caused by abundant nutrients and favorable temperatures.

**Alkali** - Various soluble salts, principally of sodium, potassium, magnesium, and calcium, that have the property of combining with acids to form neutral salts and may be used in chemical water treatment processes.

**Alkaline** - The condition of water or soil which contains a sufficient amount of alkali substances to raise the pH above 7.0.

**Alkalinity** - A term used to represent the content of carbonates, bicarbonates, hydroxides, and occasionally borates, silicates, and phosphates in water.

**Alluvial** - Relating to mud and/or sand deposited by flowing water. Alluvial deposits may occur after a heavy rain storm.

**Anaerobic** - Requiring the absence of free oxygen.

**Anaerobic Bacteria** - Bacteria that live and reproduce in an environment containing no free or dissolved oxygen. Anaerobic bacteria obtain their oxygen supply by breaking down chemical compounds which contain oxygen, such as sulfates.

**Aquifer** - A water-bearing formation or stratum beneath the earth's surface which transmits water from one point to another.

**Artesian** - An adjective applied to ground water or items connected with ground water. For example, a well underground basin where water is under pressure and will rise to a higher elevation if afforded an opportunity to do so.

**attn** - attention

**aux** - auxiliary

**Backwash** - The reversal of flow through a filter to wash clogging material out of the filtering medium and reduce conditions causing loss of head. Also called filter wash.

**Bacteria** - Primitive microscopic plants, generally free of pigment, which reproduce by dividing. They do not require light for their life processes.

**Bacteria Count** - An estimate of the total number of bacteria of all kinds in one milliliter sample

which will grow at the stated temperature, usually 37°C. Also known as standard plate count.

**Base** - An alkali or hydroxide of the alkali metals, and of ammonia, which neutralized acids to form salts and water. Ionizes to form (OH<sup>-</sup>)ions. A hydroxide. An alkali.

**bn** - battalion

**Brackish Water** - Water rendered unfit for drinking because of salty or unpleasant tastes caused by the presence of excessive amounts of dissolved chemicals, chlorides, sulfates, and alkalis.

**Buffer** - A measure of the ability or capacity of a solution or liquid to neutralize acids or bases. This is a measure of the capacity of water for offering a resistance to changes in the pH.

**BW** - biological warfare

**BZ** - hallucinogenic agent

**CB** - chemical and biological

**cfm** - cubic feet per minute

**Chloramines** - Compounds of organic amines or ammonia with chlorine.

**Chlorination** - Treatment of water by the addition of chlorine either as a gas or liquid, or in the form of hypochlorite, usually for the purpose of disinfection or oxidation.

**Chlorination, Breakpoint** - (1) The application of chlorine to water containing free ammonia to provide a free available chlorine residual. (2) The addition of chlorine until the chlorine demand has been satisfied and further additions result in a chlorine residual proportional to the amount of chlorine added after breakpoint has been reached.

**Chlorination, Post** - The application of chlorine to water subsequent to any treatment. The term refers only to the point of application.

**Chlorination, Pre** - The application of chlorine to water prior to any treatment.

**Chlorine** - A powerful disinfectant used extensively in water treatment. As a gas, its color is greenish-yellow and it is about 2 1/2 times heavier than air. As a liquid, it is amber and about 1 1/2 times heavier than water. It is toxic to all organisms and corrosive to most metals.

**Chlorine, Combined, Available Residual** - That portion of the total residual chlorine remaining in water at the end of a specified contact period which will react chemically and biologically as chloramines or organic chloramines.

**Chlorine Demand** - The difference between the amount of chlorine added to water and the amount of residual chlorine remaining at the end of a specified contact period. Chlorine demand may change with dosage, time, temperature, pH, nature, and amount of the impurities in the water.

**Chlorine Dose** - The amount of chlorine applied to a given amount of water. Usually measured in mg/l or ppm. The chlorine dose is equal to the chlorine demand plus the chlorine residual when breakpoint chlorination is being used.

**Chlorine, Free Available Residual** - That portion of the total residual chlorine remaining in water at the end of a specified contact period which will react chemically and biologically as hypochlorous acid, HOCl, or hypochlorite ion (OCl<sup>-</sup>).

**Chlorine Residual** - The total amount of chlorine (combined and free available chlorine) remaining in water at the end of a specified contact period following chlorination.

**CK** - cyanogen chloride

**Clarification** - Process of subsidence and deposition by gravity of suspended matter carried by water or other liquids. Also called settling, it is usually accomplished by reducing the velocity of flow of the liquid below the point where it can transport the suspended material.

**co** - company

**CO** - concentrate and confine

**Coagulant** - A chemical or material which when added to water will combine with added or naturally present chemicals to form a precipitate, called a floe, which will settle and aid in the removal of suspended matter in the liquid.

**Coagulation** - The destabilization and initial aggregation of colloidal and finely divided suspended matter by the addition of a floe-forming chemical.

**Coliform Organisms** - A group of bacteria, predominantly inhabitants of the intestine of

humans, but also found on vegetation, including all aerobic and facultative anaerobic bacilli that ferment lactose to produce a gas as one of the by-products.

**Colloids** - Finely divided solids which will not settle but may be removed by coagulation or biochemical action.

**Color, Apparent** - Pigmentation due to the presence of suspended solids in a water supply.

**Color, True** - Pigmentation due to the presence of finely divided particles or droplets either dispersed or in solution in a water supply.

**Command Surgeon** - The brigade surgeon, division surgeon, or corps surgeon responsible for provision of medical support at the brigade, division, or corps concerned.

**COMMZ** - communications zone

**Compound** - A substance containing molecules or two or more different elements which have entered into chemical combination with each other to form another substance unlike any of the constituent elements.

**Concentration** - A measure of the amount of dissolved substances contained per unit volume of solution. May be expressed as grains per gallon, pounds per million gallons, or milligrams per liter.

**Contaminant** - As referred to in QSTAGs and STANAGs, any physical chemical, biological, or radiological substance or matter in water.

**Contamination** - A general term signifying the introduction into water of microorganisms, chemicals, wastes, or sewage which renders the water unfit for its intended use. Usually considered to imply the presence or possible presence of disease-producing bacteria. A specific type of pollution.

**Corrosion** - (1) The destruction of a substance, usually a metal, or its properties because of a reaction with its (environment) surroundings. (2) A complex chemical or electrochemical action in which metals are converted into metallic ions and are carried into solutions resulting in damage to pipes, fittings, and other metal components.

**COSCOM** - corps support command

**CP** - command post

**CU** - color unit

**CW/BW** - chemical warfare/biological warfare

**DA** - Department of the Army

**DC** - District of Columbia

**DE** - delay and decay

**DI** - dilute and disperse

**Discharge** - (1) As applied to a stream, the rate of flow or volume of water flowing at a given place within a period of time. (2) The process of water or other liquid passing through an opening or along a conduit or channel. (3) The water or other liquid which emerges from an opening or passes along a conduit or channel.

**DISCOM** - division support command

**Disinfectant** - Any oxidant, including but not limited to chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms.

**Disinfection** - The process of killing most (but not necessarily all) of the harmful and objectionable microorganisms in a fluid by various agents such as chemicals, heat, ultraviolet light, ultrasonic waves, or radiation.

**Dissolved Solids** - Solids that are present in solution.

**DOS** - days of supply

**Drawdown** - The lowering of the water surface in a well and of the water table or piezometric surface adjacent to the well resulting from the withdrawal of water from the well by pumping. Drawdown is the difference between static level and pumping level.

**DS** - direct support

**DS2** - decontamination slurry 2

**EAC** - echelons above corps

**ED** - ethyldichlorarsine

**Effluent** - (1) A liquid which flows out of a containing space. (2) Water or other liquid partially or completely treated or in its natural state which flows out from a controlled area, be it either a reservoir, basin, or treatment operations.

**EMP** - electromagnetic pulse

**Endemic** - A disease or organism that is constantly present to a greater or lesser extent in a particular locality or region.

**Eng** - Engineer

**EPWs** - enemy prisoners of war

**Escherichia Coli (E. Coli)** - One of the species of bacteria in the coliform group. Its presence is considered indicative of fresh fecal contamination.

**est** - estimated

**Evaporation** - (1) The process by which water passes from a liquid state, at temperatures below the boiling point, to vapor. It is the principal process by which surface or subsurface water is converted to atmospheric vapor. (2) The quantity of water, measured as liquid water, removed from a specified surface per unit of time - generally in inches or centimeters per day, month, or year.

**EVO** - ethylene oxide

**F** - Fahrenheit

**FAWPSS** - Forward Area Water Point Supply System

**Filter** - A device or structure for removing solid or colloidal matter (which usually cannot be removed by sedimentation) from water or other liquids or semiliquids by a straining process whereby the solids are held on a medium of some kind (granular, diatomaceous earth, woven, or porous) while the liquid passes through.

**Floe** - Small gelatinous masses which are accumulations of microparticles, bacteria, and other organisms formed in a liquid by the addition of chemical coagulant or by the gathering together of particles by mixing.

**Flocculation** - The formation of flocs subsequent to the process of coagulation.

**FM** - field manual

**Fresh Water** - Fresh water has a TDS concentration of less than 1,500 ppm. Brackish waters are highly mineralized and have a TDS concentration between 1,500 ppm and 15,000 ppm. Saltwaters have a TDS concentration greater than 15,000 ppm.

**ft** - feet/foot

**G2** - Assistant Chief of Staff, G2 (Intelligence)

**G3** - Assistant Chief of Staff, G3 (Operations and Plans)

**GA** - Tabun (nerve agent)

**gal** - gallon

**Gallery** - (1) An underground structure designed and installed for the purpose of collecting subsurface water. (2) A passageway in a structure, such as a dam, used for obtaining access to interior parts, or to carry pipes, or to house machinery.

**GB** - Sarin (nerve agent)

**GD** - Somar (nerve agent)

**G-M** - gamma measurement

**GPD** - gallons per day

**GPH** - gallons per hour

**GPM** - gallons per minute

**GPM/D** - gallons per man/day

**Gross Alpha Particle Activity** - The total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

**Gross Beta Particle Activity** - The total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

**Ground Water** - Water occurring in a stratum (aquifer) below the surface of the ground. The term is not applied to water which is percolating or held in the top layers of the soil but to that below the water table.

**GS** - general support

**Hardness** - A characteristic of water, chiefly due to the existence therein of the carbonates and sulfates (and occasionally the nitrates and chlorides) of calcium, iron, and magnesium. Causes curding of water when soap is used, increased consumption of soap, deposition of scale in boilers, injurious effects in some industrial processes, and sometimes objectionable taste in the water. Commonly computed from the amounts of calcium and magnesium in the water and expressed as equivalent calcium carbonate.

**HD** - distilled mustard

**Head** - The height of the free surface of a fluid above a specified point in a hydraulic system. Head is expressed in linear units (or fractions thereof) such as feet or meters. Head is usually

identified as static, dynamic, friction, velocity, and total.

**Head Loss** - The decrease in head between two points. Can be caused by obstruction, friction, clogged screen, or filters.

**HN** - nitrogen mustard

**Host** - A living animal or plant in which a pathogenic organism grows.

**HP** - horsepower

**HQ** - headquarters

**HTH** - high-test hypochlorite

**HUMINT** - human intelligence

**Hydrogen-ion Concentration (pH)** - A measure of the acidity or alkalinity of a solution. A value of seven is neutral; low numbers are acid, large numbers are alkaline. Strictly speaking, pH is the negative logarithm of the hydrogen-ion concentration.

**Hypochlorinators** - Devices that are used to feed calcium or sodium hypochlorite as the disinfecting agent.

**Hypochlorites** - Compounds containing chlorine that are used for disinfection. They are available as liquids or solids.

**IMINT** - imagery intelligence

**in** - inch

**Incubation Period** - The time required between infection by a pathogenic organism and the appearance of the signs of a disease.

**inf** - infantry

**Infiltration** - (1) The flow or movement of water through the pores of a soil or other porous medium. (2) The absorption of liquid water by the soil, either as it falls as precipitation or from a stream flowing over the surface. Also called seepage.

**Influent** - Water flowing into a reservoir, basin, or treatment operation.

**Inorganic Matter** - Chemical substances of mineral origin, not of basically carbon structure.

**Inorganic Waste** - Waste material such as sand, salt, iron, calcium, and other mineral materials which are not converted in large quantities by organism action. Inorganic wastes are chemical substances of mineral origin and may contain

carbon and oxygen, whereas organic wastes are chemical substances of animal or vegetable origin and contain mainly carbon and hydrogen along with other elements.

**Ion** - An atom or molecule that has gained or lost one or more electrons.

**Ion Exchange** - A water treatment process involving the reversible interchange (switching) of ions between the water being treated and the solid resin. Undesirable ions in the water are switched with acceptable ions on the resin.

**Ion Exchange Resins (Beads)** - Insoluble polymers, used in water treatment, that are capable of exchanging (switching or giving) acceptable actions or anions to the water being treated for less desirable ions.

**Ionization** - The process of the formation of ions by the splitting of molecules of electrolytes in solution.

**IPB** - intelligence preparation of the battlefield

**ISO** - International Organization for Standardization

**JTU** - Jackson turbidity unit

**km** - kilometer

**kw** - kilowatt

**L** - Lewisite

**LAPES** - low altitude parachute extraction system

**lb/lbs** - pound/pounds

**L/d** - liters per day

**Level, Static** - The elevation of water table or pressure surface when it is not influenced by pumping or other form of extraction from the ground water body. It is the level of ground water in a well before pumping.

**LSD** - hallucinogenic agent

**m** - meter

**MASH** - mobile Army surgical hospital

**MAX** - maximum

**Maximum Permissible Concentration** - The maximum permissible level of a contaminant in water which is delivered to a free-flowing outlet of

the ultimate user of a military water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

**Membrane Filtration** - A method of quantitative or qualitative analysis of bacterial or particulate matter in a water sample by filtration through membrane capable of retaining bacteria.

**mg/l** - milligrams per liter

**Microorganism** - A minute plant or animal in water or on earth that is visible only through a microscope.

**Milligrams Per Liter** - A unit of the concentration of water or wastewater constituent. It has replaced the parts per million unit, to which it is approximately equivalent, in reporting the results of water analyses.

**Mineral** - (1) Any of a class of substances occurring in nature, usually comprising inorganic substances (such as quartz and feldspar) of definite chemical composition and usually of definite crystal structure, but sometimes also including rocks formed by these substances as well as certain natural products of organic origin, such as asphalt and coal. (2) Any substance that is neither animal or vegetable.

**ml** - milliliter

**mm** - millimeter

**MMC** - Materiel Management Center

**Molecule** - The smallest portion of an element or compound retaining or exhibiting all the properties of the substance.

**MOPP** - mission-oriented protection posture

**MOS** - military occupational specialty

**Most Probable Number** - (1) The best estimate, according to statistical theory, of the number of coliform (intestinal) organisms present in 100 ml of a water sample. (2) In the testing of bacterial density by the dilution method, that number of organisms per unit volume which, in accordance with statistical theory, would be more likely than any other possible number to yield the observed test result or which would yield the observed test

result with the greatest frequency. Expressed as density of organisms per 100 ml.

**MP** - military police

**MPC** - maximum permissible concentration

**mph** - miles per hour

**mr/h** - milliroentgens per hour

**MSR** - main supply route

**Mud Balls** - The end results of the cementing together of sand grains in a filter bed by gelatinous material, such as a coagulant. They may vary in size from a pea to 1 to 2 inches in diameter.

**NA** - not applicable

**NBC** - nuclear, biological, and chemical

**NCOIC** - noncommissioned officer in charge

**NCOs** - noncommissioned officers

**Nonpotable Water** - Water that has not been examined, properly treated, and approved by appropriate authorities as being safe for soldiers' consumption. All waters are considered nonpotable until declared potable.

**NSN** - national stock number

**NTU** - nephelometric turbidity unit

**NW** - nuclear warfare

**Organic** - (1) Characteristic of, pertaining to, or derived from living organisms. (2) Pertaining to a class of chemical compounds containing carbon.

**Osmosis** - The passage of a liquid from a weak solution to a more concentrated solution across a semipermeable membrane. The membrane allows the passage of the water (solvent) but not the dissolved solids (solutes). This process tends to equalize the conditions of either side of the membrane.

**Palatable Water** - Water that is pleasing to the taste and significantly free from color, turbidity, taste, and odor. Does not imply potability.

**PAM** - pamphlet

**Particulate** - A very small solid suspended in water which can vary widely in size, shape, density, and electrical charge. Colloidal and dispersed particulate are artificially gathered together by the processes of coagulation and flocculation.

**pCi/l** - Picocuri per liter

**PD** - phenyldichlorarsine

**Peak Demand** - The maximum load placed on a water system. This is usually the maximum average load over a period of time such as peak hourly demand, peak daily demand, or instantaneous peak demand.

**Permeability** - The property of a material which permits appreciable movement of water through it when saturated and actuated by hydrostatic pressure of the magnitude normally encountered in natural subsurface water. Perviousness is sometimes used in the same sense as permeability. The rate of permeability is measured by the quantity of water passing through a unit cross section in a unit time when the gradient of the energy head is unity.

**pH** - potential hydrogen

**pH** - A measure of the acidity or alkalinity of a solution. A value of seven is neutral; low numbers are acid, large numbers are alkaline. Strictly speaking, pH is the negative logarithm of the hydrogen-ion concentration.

**Picocuri (pCi)** - That quantity of radioactive material producing 2.22 nuclear transformations per minute.

**Plate Count** - An estimate of the number of bacteria in a specified amount of sample which will grow at a certain temperature in a given period of incubation.

**PMCS** - preventive maintenance checks and services

**POL** - petroleum, oils, and lubricants

**Pollution** - The addition of sewage, industrial wastes, or other harmful or objectionable material to water. A general term that does not necessarily signify the presence of disease-producing bacteria.

**Polyelectrolyte** - A high-molecular-weight (relatively heavy) substance having points of positive or negative electrical charges that is formed by either natural or man-made processes. Natural polyelectrolytes maybe of biological origin or derived from starch products and cellulose derivatives. Man-made polyelectrolytes consist of simple substances that have been made into complex, high-molecular-weight substances. Used with other chemical coagulant to aid in binding small suspended particles to larger chemical flocs

for their removal from water. Often called a polymer.

**Polymer** - A chemical formed by the union of many monomers (a molecule of low molecular weight). Polymers are used with other chemical coagulant to aid in binding small suspended particles to larger chemical flocs for their removal from water. All polyelectrolytes are polymers, but not all polymers are polyelectrolytes.

**Polymer, Anionic** - A polymer having negatively charged groups of ions; often used as a filter aid and for dewatering sludges.

**Polymer, Cationic** - A polymer having positively charged groups of ions; often used as a coagulant aid.

**Polymer, Nonionic** - A polymer that has no net electrical charge.

**Potable** - (1) Water which does not contain any objectionable substances or pollution and is satisfactory for human consumption. (2) Water that is free from disease-producing organisms, poisonous substances, chemical or biological agents, and radioactive contaminants which make it unfit for human consumption and many other uses. Potable water may or may not be palatable.

**ppm** - parts per million

**Precipitate** - To separate a substance, in the solid form, from a solution. The substance in solid form which has been separated out.

**Precipitation** - (1) The total measurable supply of water received directly from clouds as rain, snow, hail, and sleet; usually expressed as depth in a day, month, or year; and designated as daily, monthly, or annual precipitation. (2) The process by which atmospheric moisture is discharged onto a land or water surface. (3) The phenomenon which occurs when a substance held in solution in a liquid passes out of solution into solid form.

**Pressure** - (1) The total load or force acting upon a surface. (2) In hydraulics, the term when used without qualifications usually means pressure per unit area (pounds per square inch or kilograms per square centimeter) above local atmospheric pressure.

**Priming** - (1) The action of starting the flow in a pump or siphon. (2) The first coat applied to a surface to prevent corrosion to protect the surface.

**Product Water** - This water is the product from the water treatment process and is ready to be consumed (also called finished water).

**psi** - pounds per square inch

**psid** - pounds per square inch differential

**psig** - pounds per square inch gauged

**PVC** - polyvinyl chloride

**PVNTMED** - preventive medicine

**PWS/DS** - potable water storage and distribution system

**QM** - quartermaster

**Rate of Flow** - The volume of water per unit of time which is passing a certain observation point at a particular instant. Common expressions are cubic feet per second, gallons per minute, gallons per day, and million gallons per day.

**Raw Water** - Untreated water; usually the water entering the first treatment unit of a water purification unit. Water used as a source of water supply taken from a natural or impounded body of water, such as a stream, lake, pond, or ground water aquifer.

**Reverse Osmosis** - 'The application of pressure to a concentrated solution which causes the passage of a liquid from the concentrated solution to a weaker solution across a semipermeable membrane. The membrane allows the passage of the solvent (water) but not the dissolved solids (solutes). The liquid produced is a demineralized water.

**RNA** - ribonucleic acid

**RO** - reverse osmosis

**ROWPU** - reverse osmosis water purification unit

**RPM** - revolutions per minute

**Runoff** - (1) In the general sense, that portion of the precipitation which is not absorbed by the deep strata but finds its way into the streams after meeting the persistent demands of evapotranspiration. (2) That part of the precipitation which runs off the surface of a drainage area and reaches a stream or other body of water or a drain or sewer.

**S2** - Intelligence Officer (US Army)

**S3** - Operations and Training Officer (US Army)

**S&T** - supply and transport

**Saturation** - 'The condition of a liquid when it has taken into solution the maximum possible quantity of a given substance at a given temperature and pressure.

**Sedimentation** - Process of subsidence and deposition by gravity of suspended matter carried by water or other liquids. Also called settling, it is usually accomplished by reducing the velocity of flow of the liquid below the point where it can transport the suspended material.

**Sequestering Agent** - A chemical that causes the completing of certain phosphates with metallic ions in solution so that the ions may no longer be precipitated. Hexametaphosphates are an example.

**SGT** - sergeant

**sig** - signal

**SIGINT** - signal intelligence

**SMFTs** - semitrailer mounted fabric tanks

**Solution** - A gas, liquid, or solid dispersed homogeneously in a gas, liquid, or solid.

**Solution Feeder** - A feeder for dispensing a chemical or other material in the liquid or dissolved state to water at a rate controlled manually or automatically by the quantity of flow. The constant rate is usually volumetric.

**SP4** - Specialist 4

**Specific Capacity** - The rate at which water may be drawn from a formation through a well to cause a drawdown of a stipulated depth. The usual units of measurement are gallons per minute per foot and liters per minute per meter.

**Specific Gravity** - Ratio of the weight of a unit volume of a substance to an equal volume of water under standard conditions.

**Spring** - A surface feature where water issues from a rock or soil onto the land or into a body of water, the place of issuance being relatively restricted in size. Springs are classified in accordance with many criteria, including character of water, geologic formation, or geographical location.

**STB** - supertropical bleach

**Sterilization** - Destruction of all living organisms, usually by a chemical compound or heat.



**Stratum** - A geological term used to designate a single bed or layer of rock which is more or less homogeneous in character.

**Suspended Solids** - All visible material in water which at the time of sampling is not dissolved and which can be removed by filtration.

**Suspension** - A system consisting of small particles kept dispersed by agitation or by molecular motion in the surrounding water. The permanence of suspension is dependent on the degree of agitation and the size of particles. A colloid is a special kind of suspension.

**TA** - theater Army

**TAACOM** - theater Army area command

**TB MED** - technical bulletin medical

**TDS** - total dissolved solids

**TEMPER** - tent, expandable, modular, personnel

**Temperature** - (1) The thermal state of a substance with respect to its ability to communicate heat to its environment. (2) The measure of the thermal state on the arbitrarily chosen numerical scale, usually centigrade or Fahrenheit.

**TM** - technical manual

**TOE** - table of organization and equipment

**TON** - threshold odor number

**Total Dissolved Solids** - All of the dissolved solids in a water. TDS is measured on a sample of water that has passed through a very fine mesh filter to remove suspended solids. The water passing through the filter is evaporated and the residue represents the dissolved solids.

**TRADOC** - United States Army Training and Doctrine Command

**Treated Water** - Water that has undergone processing such as sedimentation, filtration, softening, or disinfection and is ready for consumption. Included is purchased potable water which is retreated (chlorinated or fluoridated). Does not imply potability until inspected by PVNTMED personnel and approved by the command surgeon.

**Turbidity** - (1) A condition in water caused by the presence of suspended matter resulting in the scattering and absorption of light rays. (2) A measure of fine suspended matter in liquids. (3) An

analytical quantity usually reported in arbitrary turbidity units determined by measurements of light diffraction.

**Turbidity Units** - Turbidity units are a measure of the cloudiness of water. If measured by a nephelometric (deflected light) instrumental procedure, turbidity units are expressed in nephelometric turbidity units (NTU) or simply TU. Those turbidity units obtained by visual methods are expressed in Jackson turbidity units (JTU) which are a measure of the cloudiness of water. They are used to indicate the clarity of water. There is no real connection between NTUs and JTUs. The Jackson Turbidimeter is a visual method and the nephelometer is an instrumental method based on deflected light.

**TWDS** - tactical water distribution systems

**uCi/l** - microcuries per liter

**US** - United States

**USEPA** - United States Environmental Protection Agency

**VA** - Virginia

**VAC** - volts alternating current

**VDC** - volts direct current

**Vector** - An insect or other organism that carries and transmits a pathogenic amoeba, bacterium, fungus, virus, or worm.

**Virus** - The smallest (10 to 300 millimicrons in diameter) form capable of producing infection and diseases in humans or other large species. The true viruses are insensitive to antibiotics. They multiply only in living cells where they are assembled as complex macromolecules using the cells' biochemical systems. They do not multiply by division as do intracellular bacteria.

**VX** - binary nerve agent

**Water** - A chemical compound consisting of two parts of hydrogen and one part of oxygen and usually having other solid, gaseous, or liquid materials in solution or suspension.

**Water-Bearing Formation** - A term, more or less relative, used to designate a geological formation that contains considerable ground water. It is usually applied to formations from which the ground water may be extracted by pumping.

**Water Quality** - The chemical, physical, and biological characteristics of water with respect to its suitability for a particular purpose. The same water may be of good quality for one purpose or use and bad for another, depending on its characteristics and the requirements for the particular use.

**Water Table** - The upper surface of a zone of saturation (in ground water) where the aquifer is not confined by an overlying impermeable formation.

**Well** - An artificial excavation that derives water from the interstices of the rocks or soil which it penetrates.

**Well, Artesian** - A well tapping a confined or artesian aquifer in which the static water level stands above the bottom of the confining bed and the top of the aquifer. The term is used to include all wells tapping such basins or aquifers. Those in which the head is insufficient to raise the water to or above the land surface are called subartesian wells.

**WQAS-E** - water quality analysis set - engineer

**WQAU** - water quality analysis unit